



# Year 5 Earth and Beyond Knowledge Organiser



Planets	
<ul style="list-style-type: none"> <li>• There are 8 planets in our Solar System (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune). Pluto is a dwarf planet.</li> <li>• They all orbit the Sun, which is a star, and they all have moons.</li> <li>• The first four planets are relatively small and rocky, while the four outer planets are gas giants (Jupiter and Saturn) or ice giants (Uranus and Neptune).</li> </ul>	
Orbits	
	<ul style="list-style-type: none"> <li>• The Sun, Earth and Moon are approximately spherical.</li> <li>• It takes 24 hours for the earth to rotate on its axis once.</li> </ul>
<ul style="list-style-type: none"> <li>• It takes 365 and <math>\frac{1}{4}</math> days for earth to orbit the sun.</li> <li>• Every four years we have an additional day on Feb 29th - this is called a leap year.</li> <li>• It takes 28 days for the moon to orbit earth.</li> </ul>	

Day and Night
<ul style="list-style-type: none"> <li>• The Earth rotates on its axis anti-clockwise and makes a complete rotation over 24 hours (a day).</li> <li>• This makes it appear as the Sun moves through the sky but the Earth's rotation causes day and night.</li> <li>• Different parts of the Earth experience daylight at different times - this means that it is morning, afternoon and night in different places. This is also the reason why we have time zones.</li> </ul>
Seasons
<ul style="list-style-type: none"> <li>• It is the Earth's tilt that causes the seasons.</li> <li>• The seasons are the opposite for the Northern and Southern Hemispheres.</li> </ul>

Key Vocabulary	
<b>axis</b>	An imaginary line through the middle of something.
<b>galaxy</b>	An extremely large group of stars and planets. Our galaxy is called the Milky Way.
<b>gravity</b>	The force which causes things to drop to the ground.
<b>leap year</b>	A year which has 366 days. The extra day is the 29 <sup>th</sup> February. There is a leap year every four years.
<b>orbit</b>	The curved path in space that is followed by an object going round and round a planet, moon, or star.
<b>planet</b>	A large, round object in space that moves around a star.
<b>shadow</b>	A dark shape on a surface that is made when something stands between a light and the surface.
<b>Solar System</b>	The Sun and all the planets that go round it.
<b>spin</b>	Turns quickly around a central point.
<b>star</b>	A large ball of burning gas in space.
<b>time zone</b>	One of the areas into which the world is divided where the time is calculated as being a particular number of hours behind or ahead of GMT (Greenwich Mean Time).
<b>universe</b>	The whole of space and all the stars, planets, and other forms of matter and energy in it.